

### REMARKS

Claims 1-39 are currently pending. Claims 1, 9, 18, 20, 22, 23, 29, and 31-34 have been amended for clarification only and are self-supporting and/or supported by the original claims. It is respectfully submitted that no new matter has been added.

#### Allowance of Claims 20-34

The Patent Office is thanked for allowing claims 20-34. Applicant believes that all claims are allowable.

#### Response to Response to Arguments

The Patent Office stated on page 12, lines 4-6, of the September 29, 2008, Office Action as follows: "Regarding claims 1 and 10 the combination of Kadaba and Gopalakrishnan teach a device as claimed. Kadaba teaches a buffer activity bit as a data rate request bit (see col. 4, lines 61-64 and FIG. 1)."

Kadaba discloses in column 4, lines 61-64, as follows: "FIG. 1 shows a block diagram of an embodiment of the R-RUCH structure which carries a 6 bit indicator of mobile buffer size as a scheduling request over a 10 ms. frame."

Claim 1 recites "while in the scheduled mode, the mobile station provides data transmission power information and data transmission buffer status information as a request to transmit data and a **buffer activity bit as a data rate request bit**."

Applicant requests that the Patent Office indicate where in the cited passage of Kadaba (column 4, lines 61-64) there is disclosure of "a buffer activity bit" or "a data rate request bit."

The Patent Office also cites FIG. 1 of Kadaba as teaching the claimed subject matter of "the mobile station provides ... **a buffer activity bit as a data rate request bit**." For reference, FIG. 1 of Kadaba is provided immediately below.

## Structure of Enabling Channels – Reverse Link

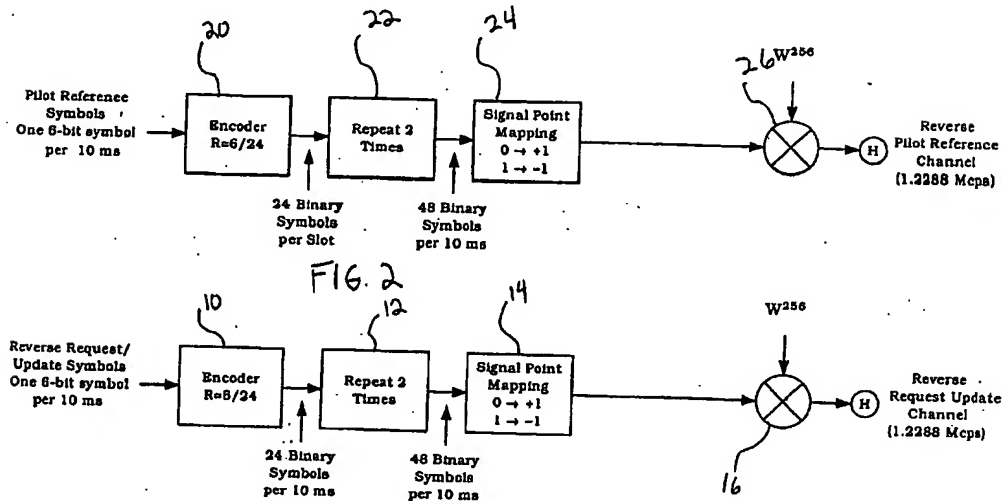


FIG. 1

The above FIG. 1 of Kadaba shows pilot reference symbols that are encoded, repeated mapped, and mixed before being transmitted on a reverse pilot reference channel and reverse request/update symbols that are encoded, repeated, mapped, and mixed before being transmitted on a reverse request update channel. But, claim 1 recites "the mobile station provides ... a buffer activity bit as a data rate request bit." FIG. 1 of Kadaba does not show "a buffer activity bit" or "a data rate request bit."

Applicant requests that the Patent Office point out where Kadaba in column 4, lines 61-64, discloses or suggests and in FIG.1, discloses, suggests, or shows "a buffer activity bit" or "a data rate request bit." Barring such a showing, disclosure, or suggestion of both elements, Kadaba does not and cannot provide a teaching for "the mobile station provides ... a buffer activity bit as a data rate request bit."

### In Response to the Rejection of Claims 1-19 and 35-39 under 35 U.S.C. 103(a)

The Patent Office rejected claims 1-19 and 35 under 35 U.S.C. 103(a) as being unpatentable over Kadaba, U.S. Patent No. 7,158,504, in view of Gopalakrishnan, U.S. Patent No. 6,836,666.

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All claims 1-19 and 35 directly or through their base claims recite as follows: “while in the scheduled mode, the mobile station provides data transmission power information and data transmission buffer status information as a request to transmit data and a buffer activity bit as a data rate request bit.”

Kadaba discloses a system where a centralized approach to supplemental channel assignment is done. Kadaba discloses, in column 5, lines 52-57, “The Encoder Packet Format Indicator Channel (R-EP-FICH) contains the format, i.e., a unique specification of the size, duration, and data rate, of the wireless unit’s current transmission. Thus, the format allows the base station to determine the size, duration, and rate of a wireless unit’s data burst transmission without ambiguity.” The mobile station reports information that indicates its data rate (column 5, lines 60-63), but does not disclose a “buffer activity bit as a data rate request bit.” A scheduling method is disclosed in U.S. Patent Application Serial No. 09/851,100, now Gopalakrishnan, U.S. Patent No. 6,836,666.

Gopalakrishnan, in column 4, lines 44-49, discloses a mobile station request for a traffic channel consists of the size of traffic data to be transmitted, information about mobile capabilities related to its power class, some auxiliary information related to the transmission, and quality of service parameters or requirements such as delay or throughput bounds. Gopalakrishnan discloses, in column 4, line 66, through column 5, line 11, the base station may choose to transmit the value of the maximum allowable transmission rate. Claim 1 of Gopalakrishnan discloses that information from which the power available at the first user station for data traffic on the reverse link can be determined to compute both a rate at which the first user station can transmit data and a certain when the first user station can transmit data, the rate and the certain time being computed so as to control the level of interference while maximizing resources on the uplink and transmitting to the first user station information that comprises an indication or when and at what rate it can transmit data. Gopalakrishnan, like Kadaba, does not disclose a “buffer activity bit as a data rate request bit.”

Thus, claims 1-19 and 35-39 are allowable over Kadaba and Gopalakrishnan.

#### **Claims 36 and 38**

Claim 36 recites “A method as in claim 1, wherein the buffer activity bit is a single bit.”

Claim 38 recites “An apparatus as in claim 10, wherein the buffer activity bit is a single bit.”

As discussed above, Gopalakrishnan, like Kadaba, does not disclose a “buffer activity bit as a data rate request bit.” Accordingly, neither Kadaba nor Gopalakrishnan can teach or suggest a buffer activity bit is a single bit where “the mobile station provides ... **a buffer activity bit as a data rate request bit.**”

Thus, claims 36 and 38 are allowable over Kadaba and Gopalakrishnan.

### **Claims 37 and 39**

Claim 37 recites “A method as in claim 1, wherein the buffer activity bit is arranged to undergo three-state modulation.”

Claim 39 recites “An apparatus as in claim 10, wherein the buffer activity bit is arranged to undergo three-state modulation.”

The Patent Office asserted, on page 11, lines 8-14, as follows:

Regarding claim 37 Kadaba and Gopalakrishnan teach a device as recited in claim 1 except for wherein the buffer activity bit is arranged to undergo three-state modulation. Kadaba teaches wherein the buffer activity bit is arranged to undergo modulation (see col. 4, lines 62-64 and col. 5, lines 57-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the buffer activity bit is arranged to undergo three-state modulation because Kadaba teaches modulation parameters that can include three-state modulation.

Kadaba discloses in column 4, lines 62-64, as follows: “FIG. 1 shows a block diagram of an embodiment of the R-RUCH structure which carries a 6 bit indicator of mobile buffer size as a scheduling request over a 10 ms. frame.”

Kadaba discloses in column 5, lines 52-60, as follows:

The Encoder Packet Format Indicator Channel (R-EPFICH) contains the format, i.e. a unique specification of the size, duration, and data rate, of the wireless unit's current transmission. Thus, the format allows the base station to determine the size, duration, and rate of a wireless unit's data burst transmission without ambiguity. Since the format also implies specific coding and modulation parameters, the base station may decode the wireless unit's transmission successfully. In this embodiment, the R-

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EPFICH accompanies the data burst and implicitly indicates the data rate, data burst or packet size, and duration, such as in the number of time slots, using a total of 4 bits. In cases where the wireless unit is being handed off, the new base station needs to know the format of the data being sent. The 4 bits designate the encoder packet format and refer to an entry in the Reverse Link rate/encoder packet lookup table shown in FIG. 3.

In neither passage of Kadaba is there disclosure of "wherein the buffer activity bit is arranged to undergo three-state modulation."

Thus, claims 37 and 39 are allowable for this additional reason.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-19 and 35-39 under 35 U.S.C. 103(a) based on Kadaba in view of Gopalakrishnan and to allow all of the pending claims 1-39 as now presented for examination. An early notification of the allowability of claims 1-39 is earnestly solicited.

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Respectfully submitted:

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### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

5.13.2009      Jessica De  
Date      Name of Person Making Deposit